#648 Jul 2026

JUG

Publication of the Northern California Contest Club

NCCC

55 Years of Contesting Excellence

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NCCC MEETING
https://nccc.cc/meetings.html
20 July 2026
See Upcoming Meetings

President's Report

Roberto SadKowski, K6KM

Dear Members,

This month finds me writing from Germany while attending Friedrichshafen. One of the great pleasures of our hobby is discovering that no matter how far you travel, familiar contesting friends are never far away. While here I had the opportunity to spend time with fellow KB'ers Denny, KX7M, and Oliver, W6NV, a reminder that the friendships built through amateur radio truly span the globe.

The next major event on the calendar is the IARU HF World Championship, and several NCCC members — including yours truly — will be attending.

In addition to the convention and contesting activities, I'm spending some time in Balingen, Germany activating Summits on the Air peaks in pursuit of my second SOTA Mountain Goat. My trusty Elecraft KX2 has been a faithful companion, and with a little luck it may help me log a few QSOs during the World Radiosport Team Championship festivities as well.

Looking ahead, our next meeting will be in Livermore. I know that weekday traffic can make the trip seem less appealing, but by all reports post-COVID traffic has improved to a "less worse" condition. More importantly, our own Gary, NA6O, will be presenting, and that alone should make the drive worthwhile. These meetings are one of the best opportunities we have to learn from each other, share stories, and

strengthen the friendships that make NCCC special.

I hope to see many of you in Livermore, and until then, good luck in the contests and enjoy the summer bands.

DL/K6KM/P Rob
President
Next week: M/K6KM

Upcoming State/Province QSO Parties

Thanks to WA7BNM

https://contestcalendar.com/stateparties.php

State/Province	Dates/Times
Maryland/DC	8 Aug 1400Z to 9 Aug 0400Z
Hawaii	**22 Aug 1600Z to 24 Aug 0200Z**
Ohio	**22 Aug 1600Z to 23 Aug 1400Z**
Kansas	**29 Aug 1400Z to 30 Aug 0200Z**
	30 Aug 1400Z to 2000Z

The Big [and not so big] Ones

WRTC	11 Jul 1200Z to 12 Jul 1200Z
NAQP RTTY	18 Jul 1800Z to 19 Jul 0600Z
NAQP CW	1 Aug 1800Z to 2 Aug 0600Z
WAE DX CW	8 Aug 0000Z to 9 Aug 2400Z
NAQP SSB	15 Aug 1800Z to 16 Aug 0600Z

OK … FD is – or is not – a contest depending on who you ask, and RAC Canada Day isn't exactly a Big One but it's their 4th of July

Weekly CW (1 hr) Events

ID	DAY	UTC	EXCH	WPM	SPONSOR
SST	Fri	2000 - 2100	Name+SPC	<20	K1USN
	Mon	0000 - 0100			
MST	Mon	1300 - 1400	Name+QSO#	20-25	ICWC
	Mon	1900 - 2000			
	Tue	0300 - 0400			
CWT	Wed	1300 - 1400	Name+CWO# or Name+SPC	20->∞	CWops
	Wed	1900 - 2000			
	Thu	0300 - 0400			
	Thu	0700 - 0800			

Thursday FT4 NCCC Sprint

The Northern California Club is again pleased to sponsor our weekly FT4 Sprint, aka FT4NS (NCCC Sprint). This contest is held every Friday UTC between 0100Z and 0130Z (Thursday evening in North America). Non-North American stations are welcome to participate. No logs are necessary; please submit your score to 3830scores.com using the "NCCC FT4 Sprint" template. FT4 NS Sprint Rules are posted at: https://www.ncccsprint.com/ns.html See you on the screen! Frequencies: 1839, 3575, 7047.5 (also 7080), 14080, 21140, 28180, 50318.

Upcoming Meetings

Gary, NA6O – NCCC Secretary

July: Monday July 20, 2026
Time: 6:00 pm
Location: Mountain Mikes Pizza, 1304 1at St. Livermore
(yes, it has a separate, quiet room!)
5:30 Meet and greet
6:00 Pizza is served
6:30 Meeting opens:
NCCC General Business & Announcements
–

Program: "Getting the Most From NCCC" with Gary, NA6O"
This will be a really useful talk for new members and as a refresher for those who forgot just how many ways you can participate in our club activities:

About NCCC
- Communicating and collaborating
- Competition
- Mentoring
- Volunteering
- Membership

We will order a variety of pizza. Please bring CASH, estimated $12 per person. Order your own drinks. We look forward to seeing you all there!

•**August:** CQP Preview with Dean: N6DE

•**September:** NCCC Family Picnic, probably same QTH as last year (Los Altos)

•**Future:** - Contesting from a Peashooter Station (NA6O)
- Contesting tips and fundamentals (~2 meetings) with N6TV and K6XX

NEW MEMBERS

Aaron Anderer, N6ACA

Livermore, CA

aaron@spectrox.com

Garrett Bissett-Mortensen, W6ILO

Livermore CA

qso@w6ilo.com

Climbing a Mast

Gary, NA6O

Up at N6RO, we have an 80 m dipole (JK-801) with a Tornado Tuner at the feed point. This allows us to obtain a match anywhere in the band. After four years, we had our first failure: The SWR went to heck, and a TDR analysis showed that the load looked like an inductor. That is, not an open or short that one would expect for a bad coax connection. So we kinda figured something happened to the Tornado.

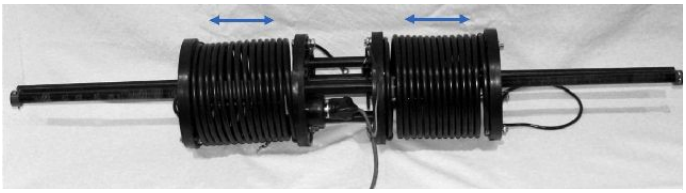


Figure 1: *Innards of the Tornado Tuner. Four-inch aluminum coils are compressed or expanded by a tiny motor.*

For those unfamiliar with this device, it consists of a large coil on each side of the feed point (Fig. 1). Coils are expanded or compressed via a small DC motor. It has no limit switches, so there is a hazard of overrunning in either direction. What happens if you go too far? That happened once when we first installed it: The motor stalled. It took several over-voltage jolts to break it free. A close call! Thankfully it was trouble-free until recently.

This time, there was no coming back, so we had to hire Hector, AD6D/XE2K, the primary Western US tower buster. In preparation, we purchased a spare Tornado Tuner and balun, not knowing for sure what the problem was. That turned out to be a good choice. Now, what makes this job interesting is that not only is the tower 134 ft tall, the dipole is at the top of a mast extending another 11 ft. There are two ways to access it: Lower the mast, which requires removing the rotator and then loosening the Yagi that sits at the top of the tower, or climb the mast. Yes, you can climb a mast, if the mast is known to be sufficiently strong (ours is), and you have mast steps (Hector brought some). And of course the climber has to know what he's doing and be rather fearless! Indeed, ***this is not a job for the casual climber!***

Fig 2:The 134-foot 80/10/6 m tower at N6RO. That little blob at the top is Hector.

Fig 3: *Hector way up*

Photos in Figs. 2 and 3 show the situation. You can see Hector carrying a tuner on his back. He never ceases to amaze us. When the defective tuner was checked, what had happened is that the coils were run beyond their maximum extension and while the motor could still run, it was no longer able to move anything. I didn't get a chance to examine the mechanism up close, but the thing is going back to the manufacturer for repair.

Trying to prevent another overrun, Hector adjusted the ramp time and maximum speed in the Green Heron RT-21 controller. This makes it easier for an operator to "bump" the tuning along without overshoot. We already had limits set, so it shouldn't have gone beyond the end. Since it uses a reed switch and pulse counter to track position, perhaps a counting error occurred. Maybe the mechanism simply failed. Nobody reported any anomalies so the whole thing remains a mystery. We'll see what Seco Systems has to say. So at last our

favorite 80 m antenna is back online and the operators are very happy.

References

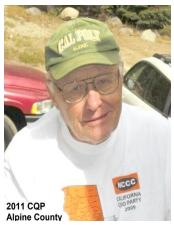
1.Presentation covering construction of this tower at N6RO:
https://n6ro.com/station/antennas/ewExternalFiles/N6RO_10m_Tower_Proj.pdf

2. Tornado Tuner manufacturer, Seco Systems. https://www.seco-systems.net/

3. Commercial mast steps are available from KF7P Metalwerks. https://www.kf7p.com/KF7P/Mast_Steps.html

Editor Notes

"Changing Of The Guard"



It is said that "time flies when you're having fun," and it certainly has flown for me as JUG Editor. It started with the December issue in 2022 and it's now the middle of 2026. And, I've really enjoyed the job of and would not be writing this were it not for age. I can blame my lack of hearing and old injuries on adventures in my 20's but a boatload of birthdays since have dulled my vision. It happens to most everyone.

Now at 86, my vision … particularly the detailed, up close part … is fading. Reading the print, finding icons on the windows, and composing the JUG issues has become difficult … and more and more prone to errors and headaches. Thus, and with reluctance, I will need to retire as The JugHead. It has kept me connected to the club and I will miss it. I can still continue as the Worked All California Counties award administrator which involves almost no detailed work on the computer.

Thanks to all who have contributed to the JUG, we wouldn't have it but for your efforts.

Having cornered the market on Johnson Matchboxes, Hank, W6SX, [aka "Radio Mammoth Lakes"], likely the most prolific contester in the club and winner of the 1st Worked All Contests award, will be taking over JUG editorial duties. I urge everyone to offer the same support to Hank as you've provided me. The JUG has a long and continuous history going back to 1969. Hank can be reached at w6sx@arrl.net

And finally, we [well, "I"] entered the JUG in ARRL's Club Newsletter Contest late last year. Winner(s) were to be announced in May, 2026 and awards presented at the Huntsville Hamvention. I've heard nothing and my AI soures can't find any announcement so I'm presuming the JUG was not the … or one of the … winners despite having the Pacific Division Director as an NCCC member. ☺ It may be coming later this year however.

About NCCC

Officers and Directors
President: Roberto Sadkowski, K6KM
Vice-President/Contest Chairman: **VACANT**
Secretary: Gary Johnson, NA6O
Treasurer: David West, KO6M [acting]
Director: Jim Brown, K9YC
Director: Chris Tate, N6WM
Director: Ed Radlo, AJ6V
Past President: David West, KO6M

Volunteers
Charter Member: Rusty Epps, W6OAT
Awards Chair: Gary Johnson, NA6O
California QSO Party Chair: Dean Wood, N6DE
QSL Mgr [K6ZM]: WN6A
QSL Mgr [K6CQP/N6CQP/W6CQP]: Dean Wood, N6DE
NAQP Teams: **VACANT**
NA CW Sprint Teams: Bob Vallio, W6RGG
NCCC Email Reflector Admin: Phil Verinsky, W6PK
Worked All CA Counties Award: Fred Jensen, K6DGW
Photographer: Bob Wilson, N6TV

NCCC Thur Night Contesting: *ncccsprint.com*
radiosport.world/ladder
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Vic Diccico *vicd@uwaterloo.ca*
NS CW Ladder: Bill Haddon, N6ZFO/4 *n6zfo@arrl.net*
Tim Shoppa *tshoppa@gmail.com*
FT4/8 Sprint: Dennis W1UE *egan.dennis88@gmail.com*

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Webinars: Bill Fehring, W9KKN
Membership: Gary Johnson, NA6O/Ian Parker, W6TCP

JUG Editor
Fred Jensen, K6DGW: *k6dgwnv@gmail.com*
Home: 775.501.5488
Cell: 530.210.0778

NCCC Membership Information

If you wish to join NCCC, please fill out an application for membership, which will be read and voted upon at our monthly meeting. To join, you must reside within club territory which is defined as everything in California north of the Tehachapi's up to the Oregon state line, and part of northwestern Nevada (anything within our ARRL 175-mile radius circle centered at 10 miles north of Auburn on Highway 49).

Life Memberships

Life memberships are $250.00 Contact secretary.nccc@gmail.com. Members who have reached 80 years of age have and been an NCCC member for 20 or more years are eligible for Honorary Life Membership ("80/20 Rule"). Contact secretary.nccc@gmail.com

JUG Articles Wanted!

Please consider submitting an article! The preferred format is plain, unformatted ASCII text MS Word (.doc/.docx) are acceptable, Pictures should be as high a resolution as available. Please do not spend time formatting your submittal, the templates will re-format everything. Send your material to *k6dgwnv@gmail.com*

Northern California Contest Club Reflector—Guidelines

The NCCC email reflector is devoted to the discussion of contesting. Topics include contests, station building, dxpeditions, technical questions, contesting questions, amateur radio equipment wants/sales, score posting, amateur radio meetings/ conventions, and membership achievements. Postings may not include personal attacks, politics, or off-subject posts. Such postings will be considered a violation of the Guidelines

Find NCCC on Social Media

Facebook: "Northern California Contest Club"

X (aka Twitter): "NCCCKB"

NCCC Lands' End Store

We are pleased to announce that the new NCCC Land's End store is online! You can choose from an array of shirts, jackets, and hats and apply your choice of custom-embroidered NCCC logos: A plain one, or one that also says Fifty Years. And, you can personalize your item by adding your name and/or call sign. The store is open 24/7 and items are shipped directly to you. No more waiting for everyone else to make up their minds on a group purchase.

https://business.landsend.com/store/nccc/ or from the NCCC website: http://nccc.ccc/members/lestore.html
Thanks to W6TCP for helping to set this up. Instructions for purchases from Lands' End NCCC Store

1. Go to https://business.landsend.com/store/nccc/
2. Click on Men's or Women's link, then choose item(s)
3. Pick color, inter quantity of each size you want to order.
4. Click Apply Logos and Personalizations. This will display the logo choices. Try them out. It will show you what they look like on your chosen fabric color.
5. Select a location for logo (left side, ride side, back, etc)
6. Click Apply Logo.
7. Optionally, click Add Personalization to add your name or call sign ($8.00, 10 character limit)
8. Click Add to Bag and Continue Shopping or.

   Start Secure Check out. Account creation and credit card required.

K4 HIGH-PERFORMANCE DIRECT SAMPLING SDR

A direct-sampling SDR you'll love to use

Our new K4 transceiver harnesses advanced signal processing while retaining the best aspects of the K3S and P3. It features a 7" touch display, plus a rich set of dedicated controls. Per-VFO transmit metering makes split mode foolproof. Band-stacking registers and per-receiver settings are versatile and intuitive. Control usage information is just one tap away thanks to a built-in help system.

Modular, hybrid architecture adapts to your needs

The basic K4 covers 160-6 m, with dual receive on the same or different bands. The K4D adds diversity receive, with a full set of band-pass filters for the second receiver. (Thanks to direct RF sampling, there's no need for crystal filters in either the K4 or K4D.) The K4HD adds a dual superhet module for extreme-signal environments. Any K4 model can be upgraded to the next level, and future enhancements–such as a planned internal VHF/UHF module–can be added as needed.

Single or dual panadapter, plus a high-resolution tuning aid

The main panadapter can be set up as single or dual. Separate from the main panadapter is our per-receiver *mini-pan* tuning aid, with a resampled bandwidth as narrow as +/- 1 kHz. You can turn it on by tapping either receiver's S-meter or by tapping on a signal of interest, then easily auto-spot or fine tune to the signal.

Comprehensive I/O, plus full remote control

The K4's rear panel includes all the analog and digital I/O you'll ever need. All K-line accessories are supported, including amps, ATUs, and our K-Pod controller. The Video output can mirror the K4 screen or display a high-res Panadapter only screen. Via Ethernet, the K4 can be 100% remote controlled from a PC, notebook, tablet, or even another K4, with panadapter data included in all remote displays. Work the world from anywhere–in style!

K4 KEY FEATURES

- Optimized for ease of use
- Modular, upgradeable design
- 7" color screen with touch and mouse control
- ATU with 10:1+ range, 3 antenna jacks
- Up to 5 receive antenna sources
- Full remote control via Ethernet

The K4 interfaces seamlessly with the KPA500 and KPA1500 amplifiers

'The performance of their products is only eclipsed by their service and support. Truly amazing!' **Joe - W1GO**

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10 kHz to 3 GHz Super Wideband Coverage • Real-time Spectrum Scope w/Waterfall Function • Remote Control Function through IP Network or USB Cable • Decodes Digital Incl P25, NXDN™, D-STAR • SD Card Slot for Receiver Recorder

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• HF/50/144/430/440 MHz Multi-band, Multi-mode, IF DSP • D-STAR DV Mode (Digital Voice + Data) • Intuitive Touch Screen Interface • Built-in RTTY Functions

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• VHF/VHF, UHF/UHF simultaneous receive • 50 watts of output on VHF and UHF • Optional VS-3 Bluetooth® headset • Easy-to-See large white backlight LCD • Controller attachment to the main Unit

ID-5100A Deluxe

VHF/UHF Dual Band Digital Transceiver

• Analog FM/D-Star DV Mode • SD Card Slot for Voice & Data Storage • 50W Output on VHF/UHF Bands • Integrated GPS Receiver • AM Airband Dualwatch

IC-V3500 | *144MHz FM Mobile*

• 65W of Power for Long Range Communications • 4.5 Watts Loud & Clear Audio • Modern White Display & Simple Operation • Weather Channel Receive & Alert Function

IC-2300H | *VHF FM Transceiver*

• 65W RF Output Power • 4.5W Audio Output • MIL-STD 810 G Specifications • 207 alphanumeric Memory Channels • Built-in CTCSS/DTCS Encode/Decode • DMS

IC-V86 | *VHF 7W HT*

• 7W OutputPower Plus New Antenna Provides 1.5 Times More Coverage • More Audio, 1500 mW Audio Output • IP54 & MIL-STD 810G–Rugged Design Against Dust & Water • 19 Hours of Long Lasting Battery Life • 200 Memory Channels, 1 Call Channel & 6 Scan Edges

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Real-time Spectrum Scope with Automatic Scope Control • Multi-color waterfall display • State of the art 32-bit Digital Signal Processing System • 3kHz Roofing Filter for enhanced performance • 3.5 Inch Full Color TFT USB Capable • Internal Automatic Antenna Tuner • High Accuracy TCXO

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• Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics • Unparalleled - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream

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FT-891 | *HF+50 MHz All Mode Mobile Transceiver*

Stable 100 Watt Output • 32-Bit IF DSP • Large Dot Matrix LCD Display with Quick Spectrum Scope • USB Port Allows Connection to a PC with a Single Cable • CAT Control, PTT/RTTY Control

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• 50W Output Power • Real Dual Band Operation • Full Color TFT Display • Band Scope • Built-in Bluetooth • WiRES-X Portable Digital Node/Fixed Node with HRI-200

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FTM-200DR | *C4FM/FM 144/430MHz Dual Band*

• 1200/9600bps APRS® Data Communications • 2" High-Res Full-Color TFT Display • High-Speed Band Scope • Advanced C4FM Digital Mode • Voice Recording Function for TX/RX

FTM-400XD | *2M/440 Mobile*

• Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bd ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band

FT-70DR *C4FM/FM 144/430MHz Xcvr*

• System Fusion Compatible • Large Front Speaker delivers 700 mW of Loud Audio Output • Automatic Mode Select detects C4FM or Fm Analog and Switches Accordingly • Huge 1,105 Channel Memory Capacity • External DC Jack for DC Supply and Battery Charging

FT-5DR *C4FM/FM 144/430 MHz Dual Band*

• High-Res Full-Color Touch Screen TFT LCD Display • Easy Hands-Free Operation w/Built-In Bluetooth© Unit • Built-In High Precision GPS Antenna • 1200/9600bps APRS Data Communications • Supports Simultaneous C4FM Digital • Micro SD Card Slot

FT-65R | *144/430 MHz Transceiver*

Compact Commercial Grade Rugged Design • Large Front Speaker Delivers 1W of Powerful Clear Audio • 5 Watts of Reliable RF Power Within a compact Body • 3.5-Hour Rapid Charger Included • Large White LED Flashlight, Alarm and Quick Home Channel Access

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• All New User Operating Interface-E2O-III (Easy to Operate-III) • Robust Speaker Delivers 3W of Clear, Crisp Receive Audio • Detachable Front Panel Can Be Mounted in Multiple Positions • Supports Optional Bluetooth® Wireless Operation Using the SSM-BT10 or a Commercially Available Bluetooth® Headset

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